Appl. No. 10/823,902 Docket No.: E2079-00006

Reply to Office Action dated 11/18/2004

REMARKS/ARGUMENTS

As a result of this Amendment, claims 57-67, 69-80, and 82-84 are under active consideration in the subject patent application.

In the Official Action, the Examiner has:

- (1) acknowledged the preliminary amendment filed August 3, 2004;
- (2) acknowledged consideration and entry of the Information

 Disclosure Statement filed September 20, 2004, and alleged that Applicants
 failed to specify pertinent portions of *Numerical Recipes in C* (William H. Press et al.) and *Remote Sensing for Agriculture, Ecosystems, and Hydrology* (SPIE, vol 3499);
- (3) advised that should claim 66 be found allowable, claim 68 will be objected to under 37 CFR §1.75, as being substantial duplicate claims;
- (4) objected to claim 81 under 37 CFR §1.75, as being a substantial duplicate of claim 79;
- (5) rejected claims 63- 64 and 76-77 under 35 U.S.C. §112, second paragraph;
- (6) rejected claims 57-59 and 65-69 under the judicially created doctrine of double patenting over claim 5-11, 14-18 and 21-40 of U.S. Patent No. 6,765,668 B2, and stated that a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c), would overcome this rejection;
- (7) objected to claims 60-62 as being dependent upon a rejected base claim, and indicated that claims 60-62 would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims;

- objected to claims 63-64 and 76-77 stating that they would be (8) allowable if rewritten or amended to overcome the rejection under 35 U.S.C. §112, second paragraph;
- identified claims 70-75, 78-80, and 82-84 as defining allowable (9)subject matter; and
- directed Applicants attention to U.S. Pat. No. Re. 36,529, issued to (10)Lewis et al., at cols. 12 and 13.

With regard to Item 1, no comment appears to be necessary.

With regard to Item 2, Applicants submit that the Numerical Recipes in C (William H. Press et al.) reference provides examples of prior art numerical techniques suitable for use with various aspects of the present invention, while Remote Sensing for Agriculture, Ecosystems, and Hydrology (SPIE, vol 3499) provides several articles relative to sensing infrared spectral data that is pertinent to various aspects of the present invention. Applicants once again request the Examiner to consider these references in their entirety and enter them into the application file as of record in the case. Reconsideration is requested.

With regard to Items 3 and 4, claims 68 and 81 have been cancelled from the present application to attend to the objections to claims 66 and 79 as being substantial duplicates. Reconsideration and withdrawal of the Examiner's objections under 37 CFR §1.75 are requested.

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With regard to Item 5, Applicants have amended claims 63 and 64 so as to be dependent from claim 62 and amended claims 76 and 77 so as to be dependent from claim 75. These changes are in conformance with the suggestions of the Examiner, and correct an inadvertent typographical error. Reconsideration and withdrawal of the Examiner's rejections under 35 U.S.C. §112, second paragraph, are requested.

With regard to Items 6-8, a Terminal Disclaimer To Obviate A Double Patenting Rejection Over A Prior Patent is attached to this response and is believed to be in compliance with 37 C.F.R. §1.321(c). The Terminal Disclaimer has been signed by an Attorney of Record in the case. The Commissioner is hereby authorized to charge the fees required in connection with the Terminal Disclaimer, namely \$65,00, or any additional fees, to Deposit Account No. 04-1679. Accordingly, Applicants request entry of the Terminal Disclaimer and reconsideration and withdrawal of the double patenting rejection of claims 57-59 and 65-69.

Claims 60-62 present allowable subject matter, and depend directly from allowable claim 57. Claims 63 and 64 have been amended so as to be dependent from allowable claim 62 thereby obviating the §112, second paragraph issues raised by the Examiner. Accordingly, claims 60-64 are in form for allowance.

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With regard to Item 9, Applicants acknowledge with appreciation the Examiner's determination that claims 70-75, 78-80, and 82-84 are allowable over the prior art of record in the case.

With regard to Item 10, Applicants have considered the prior art reference identified by the Examiner as pertinent and determined that whether taken alone, or in any valid combination with the other prior art references of record in this application, does not anticipate or render obvious the present invention.

In view of the foregoing, Applicants respectfully submit that claims 57-67, 69-80, and 82-84 are in condition for allowance. Applicants respectfully request that a timely Notice of Allowance be issued in this case.

If a telephone conference would be of assistance in advancing prosecution of the above-identified application, Applicants' undersigned Attorney invites the Examiner to telephone him at <u>717-237-5516</u>.

Date: 2/14/05

Respectfully Submitted,

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